I. BACKGROUND

This past weekend we entered the fourth year of the post-9/11 era. Were we to project the timeline of this “War on Terror” back against those of other historic American conflicts, we would find ourselves on the eve of 1864’s decisive Wilderness and Atlanta campaigns or preparing for the final assaults on the inner works of Nazi Germany and Imperial Japan. At a similar point in these past momentous struggles, the prevailing public sense was that we had not only survived, but had found unexpected strength in our response to initial setbacks, had successfully organized our people and infrastructure to meet the challenge of dangerous enemies, had taken the initiative on all major fronts, and were entering the final phases of still arduous, but inevitably victorious conflict. No such common perception prevails today.

This conference has long been a valuable gathering of the best thinking on how to promote marine safety and the protection of the marine environment. A question that links modern maritime security discussions to past safety concerns is whether there are lessons of value that can be transported from safety achievements and applied to protect vessels, crews, and cargoes from acts of terror. A closely related question is whether security concerns at all levels of industry and government are in any way working at cross-purposes to the safety gains of the past twenty years. Finally, we face the permanently vexing question of how to convince those in the political process that direct public investment in the infrastructure of maritime safety and security is wise and necessary.

II. WHERE DO WE STAND?

Unlike past wars, this war lacks a physically distinct division between the homefront and the battlefield. The battlefield of the current conflict is the major population and economic centers of the United States and other developed nations. The battle is no less desperate on days when nothing happens. Battlefield success in this war will be a prolonged series of days when nothing happens. It is tempting to say that defeat is the one day that a device is detonated or pestilence released within the system. However, properly understood, it must be acknowledged that no precautions will be perfect. There probably will be incidents involving transport. If, because of rational planning and precautions, incidents are contained with little disruption to the
flow of goods and with limited human casualties, the system has worked optimally. There can be no perfection in marine security. Perfection is possible only if we shut down the system. That kind of perfection will kill us.

Maritime professionals have known for decades that the sheer volume of international trade through the ports of the United States is not only the lifeblood of this economy, but is also a point of vulnerability for those who wish to ignore our laws or to do us harm. The near universal use of the marine shipping container for the efficient movement of goods in international trade has been an enormous force for economic development around the world. But the attributes of the marine container that have enabled it to become the engine of increased trade also enable it to mask the movement of contraband, weapons, and illegal personnel.

We have all seen statistics that define the enormity of the security challenge:

- More than 350 public ports, nearly 4,000 passenger and cargo terminals
- Approximately 60,000 annual vessel calls;
- Six million or more inbound containers;
- Approximately 100,000 miles of coastline.

The list is infinitely expandable. What it quickly tells us is that the Marine Transportation System is not susceptible to a point defense. It is truly a system that can only be hardened on a systemic basis. This essentially the safety lesson that all of us have learned over the years. It now must be applied to another challenge. Put more darkly, the systemic nature of the nation’s marine transport infrastructure dictates that, despite its size and healthy cargo volumes, it is very vulnerable to disruption. There no doubt is a law of mechanics that states that the more numerous the linkages in a system, the more prone to break-down it becomes. The Marine Transportation System is not only a complex system within the United States, but it also is intricately linked with land modes, ports, and manufacturing industries in other countries.

Since 9/11 there has been a cascade of marine security measures. Among these are:

- Advance Notice of Arrival Requirements
- Passage of Marine Transportation Security Act
- Consolidation of elements of Coast Guard, Customs, and Border Patrol functions in a new Department of Homeland Security
- Implementation of International Ship and Port Facility Security (ISPS) convention
- Implementation of vessel and container targeting protocols
- Advance submission of cargo manifests
• Security assessments and Customs inspections at foreign ports (CSI)
• Elimination of Crew List Visas
• Deployment of AIS transponders and Cargo imaging devices and sensors
• Development of vessel, facility and port security plans.
• Efforts to improve crew and other maritime worker credentials
• Disbursement of federal grant money for port security improvements.

This list is exemplary and not exhaustive. Each of the listed items contains within it numerous additional requirements and obligations on vessels, ports, and facilities, to which many of you have had direct personal exposure. We should not be beguiled by the numbers of new requirements on the list. The real test is whether all these requirements result in real security benefits without offsetting costs or imbalances in the transportation system.

III. HOW DO WE PAY FOR THIS?

Despite all this activity in the space of around two years, severe problems remain. Perhaps the most alarming is the apparent lack of political resolve or resources to provide meaningful direct public investment in security infrastructure. Responsible estimates of total port costs for security improvements over ten years hover between five and six billion dollars. By the end of 2003, Congress had appropriated a bit less than $600 million dollars, but not all of this amount has been disbursed. FY 2005 Administration budget requests were somewhat less than $50 million. The Department of Homeland Security 2005 allocation for protection of all systems - maritime, aviation, rail and others - throughout the country is roughly one-third of the Department of Defense appropriation for improvement of security at U.S. military installations.

Keep in mind that these security requirements come on top of severe infrastructure improvement needs driven by the demands of growing trade volumes. Members of the maritime community who have worked in past years to sensitize federal agencies to the need for investment in navigation and port infrastructure know that even relatively modest funding for such programs as real-time tide and current data, vessel traffic systems, aids to navigation, hydrographic surveys and updated charts was very difficult to obtain. A 1996 INTERTANKO study pointed out that, despite intense public and political scrutiny of vessel safety for tank vessels, the level of United States public investment in the marine transport infrastructure was totally inadequate both relative to other maritime nations and in absolute terms given the volume of traffic and size of vessels. While this study stimulated the formation of the Marine Transportation System National Advisory Council (MTSNAC), and modest funding improvements for hydrographic activity and the PORTS system have resulted, the overall federal fiscal commitment to the nation’s ports and waterways remained feeble, even during the days of robust federal budget surpluses.
Even with the dramatic prod of 9/11, the political instinct concerning vessel safety and port security is to be quick to mandate, but slow to fund. Underlying this instinct is the assumption that mandates will force recapture of compliance costs through the market. At some theoretical level, this notion has some validity, but the mechanism is imperfect at best. It also radically distorts the nature of the threat. The threat to security in the marine transportation system is political and is directed against the government of the United States. That government’s highest obligation is to provide for the defense of its citizens. While effective measures require industry involvement and compliance, government cannot sub-contract out its obligations to vessel owners and ports and still be certain that its citizens are receiving the quality of protection they need.

Substantially increased federal government investment and supervision is also needed to prevent delays and inconsistencies in industry compliance. Stephen Flynn, a well-known commentator on security issues, recently applied the 19th Century concept of the “tragedy of the commons” to describe the dynamic of security improvements left to private initiative. In short the tragedy of the commons is that individual actors, even when they recognize an overwhelming common threat, are reluctant to modify their behavior to meet the threat for fear that less noble-minded individuals will play for short-term advantage by refusing to accept additional cost or inconvenience. In the long run, everyone loses, because the irresponsibility of a few individuals will hasten the common tragedy that all recognized to begin with. However, in the near-term, non-compliance pays unless there is some supervening authority to ensure strict universal compliance.

Consider the marine safety equation in the post-Exxon Valdez environment. As responsible industry actors moved to improve marine safety, there always was concern that a few opportunistic individuals could wreak havoc if they chose to avoid the enormous costs of new vessels, training, methods and equipment. Should their lack of commitment to safety cause a tragic spill, even the responsible operators would be vulnerable to political and public opinion attacks. The resulting restrictions might destroy the substantial investment that careful operators had made in vessels, personnel and procedures. The Oil Pollution Act of 1990 and analogous international requirements have minimized this possibility. The tragedy of the commons has largely, although not completely, been averted in the area of tank vessel safety. Industry and governments have cooperated to make it fairly difficult for “rotten apples” to circumvent sound and uniformly administered structural, navigational, and personnel requirements. Put more simply, there are very few places in the world, let alone the nation, that substandard vessels can operate.

Budget increases for homeland security initiatives for FY 2005 are roughly 10% over the previous fiscal year. Port security earmarks increased $224 million, of which $102 million is attributable to Coast Guard efforts to administer the Maritime Transportation Security Act. These increases are substantial if compared to a 2001 baseline. On the other hand

The need for substantially increased direct public contribution to maritime security is, in my view, particularly acute in the area of increased personnel, training and equipment budgets for the United States Coast Guard and Customs. Enormous burdens have been placed on these agencies. While recent appropriations have reflected increased responsibilities, the scale and
order of magnitude of necessary expenditures is far beyond FY 2005 levels. In the case of the Coast Guard, current budget levels are probably making good shortfalls, particularly in areas such as high seas patrol capability, that existed on September 10th 2001. The Coast Guard FY 2005 budget ($6.3 billion) has increased by roughly 65 per cent since 2001, a baseline that was inadequate even for the pre-9/11 era.

Another exemplary area for substantial federal expenditure is in the area of container inspection hardware and other detection devices. Some of these technologies are in a state of rapid development and there will inevitably be a rapid turnover of equipment. To cope with the volume of trade through our ports, a large number of units will be required. The DHS FY 2005 budget includes $50 million for new radiation screening devices for both passenger and cargo operations.

Legislation was introduced in this Congress that would dedicate a funding stream derived from Customs duties for development of port security capabilities. The maritime industry has attempted (in vain) to identify dedicated funding sources in the past to offset the costs of increased safety improvements in American ports and waterways. If security improvements can be even partially funded from the substantial stream of revenue created by the commerce that moves through American ports, this would represent a substantial step forward for maritime infrastructure.

IV. LESSONS FROM LEMONS

The Washington Post recently brought to general public attention an incident that was fairly well known in the maritime industry, but which merits close scrutiny. As recounted by the Post, on 31 July the Coast Guard seized a shipment of approximately 1 million lemons that were en route by ship from Argentina to Montreal. The seizure was prompted by an anonymous e-mail tip alleging that one of five containers aboard a CSAV ship destined to call Port Elizabeth had been adulterated with a biological agent. The ship was held offshore for a week while cargo and crew were inspected. Initial indications were that the cargo was not a threat, and Customs officials urged that the cargo be landed for further inspection. The Post account indicates that state and local officials resisted permitting the vessel to land its cargo until the entire lemon shipment had been removed and destroyed. In the meantime, the vessel was held offshore and its entire cargo was delayed.

All indications are that the anonymous tip was baseless and motivated by personal or commercial spite. The cargo value was around $70,000. Its loss was a substantial one for the cargo owner, a small business in Argentina. It is not clear how the owner will be compensated for that loss.

As layers of controls escalate, the questions raised by what the Argentine press calls “Lemongate” are important ones. How effective is our security system if it can be activated to destroy legitimate commercial activity on the basis of an anonymous act of spite? Given the security stakes, can the Coast Guard or any other agency in the mix risk ignoring such a tip? How do we make whole those who are harmed by such behavior? Is our commerce vulnerable
to terrorists who sense that substantial damage to commerce can be inflicted simply by releasing bad information, rather than explosives or toxins?

Until we have good systemic answers to these questions, we do not have an effective maritime security system. The incident demonstrates that our sensitivity to maritime security concerns, and our increased capability to respond quickly to perceived threats can be in itself a vulnerability.

V. SUMMING UP

Maritime Security is a work in progress. Much has been started, but we lack sufficient information and experience to determine whether we have substantially hardened the defenses of the Marine Transportation System. Many of the changes that have been made show promise of not only improving the knowledge necessary to provide security, but also to aid the flow of commerce. It is clear, however, that substantial public investment is necessary, that public resources are not readily available, and that the political resolve to find those resources has not matured. It is also clear that the system that has evolved is vulnerable to deceptions and misinformation. The key test over time is whether we can build an affordable security system that does not impede the flow of commerce or impose costs that are unequally spread over the entire population of those who benefit from the system.